

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

690 Walnut Ave.St. 150

Vallejo, CA 94592-1133

(707) 649-5453

(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015523**Date Inspected:** 28-Jun-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** ZPMC and ABF**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG 13 section**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. Wai Pau, was present during the times noted above for observations relative to the work being performed.

Bay#5

Caltrans QA inspector observed two ZPMC welders performed SMAW build up weld metal (buttering) process on the flange of traveler rail #20TR-002 and 20TR2-004. The buttering areas are located both ends of top and bottom flanges. The buttering size is along the both edge ends of flanges with 10mm width. All of buttering areas have been pre-heating to specific desired temperature prior SMAW welding. The SMAW process were monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA Inspector observations, no discrepancies were noted.

Caltrans QAI observed two ZPMC heat straightening operators performed heat straightening with ZPMC Heat Straightening Report on travel rail beams. The travel rail beams ID are 10TR1-013, 10TR3-007, 10TR3-027 and 10TR2-011. The heating temperature is maximum 650 C (1200 F) and cool in still air. All the plates for heat straightening have been inspected and recorded by ZPMC QC. Based on Caltrans QAI observation, no discrepancies were noted.

Bay #6

Caltrans QA Inspector observed a ZPMC welder in process SMAW CJP process on west jacket frame (WJF) leg. The CJP weld is designed single bevel with back bar welded in flat position. The WJF and weld ID is WJF-6-174~176. The SMAW welding was monitored and recorded by ZPMC and ABF QC inspector. Based on

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Caltrans QA inspector observations, no discrepancies were noted.

Caltrans QA Inspector observed two ZPMC welders in process FCAW repair fillet weld process on west jacket frame (WJF). A numerous repair fillet weld areas have been rejected by visual inspection due to exceed weld profile which limited by AWS D1.5 section 3. The FCAW welding was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA inspector observations, no discrepancies were noted.

Bay#7

Caltrans QA Inspector observed two welding operators in process of semi-automatic FCAW on stiffeners. The stiffener weld is designed PJP with T-joint weld and located on the side plate. The side plate and stiffener weld ID is SP3043A-001-013~048. All of PJP joint regions have been pre-heating to specific desired temperature prior welding. The semi-automatic FCAW process was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

Caltrans QA inspector observed two fit up groups performed fit up and SMAW tack weld process on T-joint fillet weld. The T-joint is connected to stiffeners and edge plate #EP3021A and EP3013E of OBG section 13. A numerous temporary tack welds have been welded attach between edge plate and stiffeners after adjusted and secured by hand jack. The fit up SMAW tack welding process were monitored and recorded by ZPMC and ABF QC inspector. Base on Caltrans QAI observation, no discrepancies were noted.

Bay# 8

Caltrans QA inspector observed a ZPMC welder performed FCAW CJP process on the flange to flange for floor beam of cross beam # CB17. The weld ID is FB3057-054-057. The region of the weld joint has been pre-heating to specific desired temperature prior FCAW welding. The FCAW process were monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA Inspector observations, no discrepancies were noted.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

As notes within report above

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact James Devey 15000026784 , who represents the Office of Structural Materials for your project.

Inspected By:	Pau, Wai	Quality Assurance Inspector
Reviewed By:	Clifford, William	QA Reviewer
